Polymer Degradation and Stability **35** (1992) 293–295

CONTENTS OF VOLUME 35

Number 1

Editorial 1
Photo-oxidation of Poly(phenylene ether): A Reexamination of the Mechanism . . . 3
AGNÈS RIVATION & PATRICK MOREL (France)
The Kinetics of Oxidative Induction of LDPE Stabilized with Commercial Anti-oxidants 17
CZESŁAW LATOCHA & MARIA UHNIAT (Poland)
Synthesis and Thermal and Photooxidative Behaviour of 1,*n*-bis(3-hydroxy-4-benzoylphenoxy) Alkanes in Polyolefin Films 23
N. S. ALLEN, E. HAQUE, E. M. HOWELLS (UK)
K. KIKKAWA & M. MINAGAWA (Japan)
Thermal Stability of the Shielding Effectiveness of Composites to Electromagnetic Interference Effects of Matrix Polymers and Surface Treatment of Fillers 33
ZENJIRO OSAWA & SATOSHI KUWABARA (Japan)
Kinetics of Polymer Degradation Involving the Splitting-off of Small Molecules: Part 4. Autocatalytic Mechanism with Immediate Zip Growth 45
PETER ŠIMON (Czechoslovakia)
Dielectric Properties of Some Synthetic Rubber Mixtures: Part I. Neoprene–Carbon Black Mixtures 49
FAIKA F. HANNA, KAMAL N. ABDEL-NOUR & SALWA L. ABDEL-MESSIEH (Egypt)
Photocatalytic Degradation of Polyethylene Film by Incorporated Extra-fine Particles of Titanium Dioxide 53
BUNSHO OHTANI, SHUJI ADZUMA, SEI-ICHI NISHIMOTO & TSUTOMU KAGIYA (Japan)
Diffusion of Hindered Amine Light Stabilizers in Low Density Polyethylene and Isotactic Polypropylene 61
J. MALÍK, A. HRIVÍK & E. TOMOVÁ (Czechoslovakia)
High-temperature Oxidation and Stabilization of Polymers 67
YU. A. SHLYAPNIKOV & I. A. SERENKOVA (USSR)
Thermal Oxidation of Anhydride Cured Epoxies, I—Mechanistic Aspects 77
H. M. LE HUY, V. BELLENGER, J. VERDU & M. PARIS (France)
Enzymatic Degradation of Poly(3-hydroxybutyrate)-based Blends: Poly(3-hydroxybutyrate)/poly(ethylene oxide) Blend 87
YOSHIHARU KUMAGAI & YOSHIHARU DOI (Japan)
Book Reviews 95
Calendar of Events 97

Number 2

X-ray induced degradation of poly(vinylidene fluoride) films 99
YOSHIO KAWANO & SANDRA SOARES (Brazil)
Studies on polymer stabilizers: Part II. A new concept of a synergistic mechanism between phenolic and thiopropionate type antioxidants 105
SHIN'ICHI YACHIGO, MANJI SASAKI & FUMITOSHI KOJIMA (Japan)
Usability analysis of a simplified kinetic equation for evaluation of antioxidant action in LDPE 115
CZESŁAW LATOCHA & MARIA UHNIAT (Poland)

Polymer Degradation and Stability (**35**) (1992) © 1991 Elsevier Science Publishers Ltd.

Dielectric properties of some synthetic rubber mixtures: Part II. Butyl rubber–carbon black mixtures 121
KAMAL N. ABDEL-NOUR, FAIKA F. HANNA & SALWA L. ABDEL-MESSIEH (Egypt)
Physical loss of hindered amine light stabilizers from polyethylene 125
J. MALÍK, A. HRIVÍK & D. ALEXYOVÁ (Czechoslovakia)
Vacuum photolysis of poly(phenylene ether) at short and long wavelengths 131
AGNÈS RIVATON & PATRICK MOREL (France)
Retardation of polymer oxidation by natural antioxidant gossypol: Part 1—Kinetics of oxygen consumption 141
A. P. MAR'IN, YU. A. SHLYAPNIKOV, E. S. MAMETOV & A. T. DZHALILOV (USSR)
Methods for predictive stability testing of archival polymers: A preliminary assessment of cellulose triacetate based motion picture film 147
M. EDGE, N. S. ALLEN, D. A. R. WILLIAMS, F. THOMPSON & V. HORIE (UK)
Kinetics of polymer degradation involving the splitting-off of small molecules: Part 5—Autocatalytic mechanism with gradual zip growth 157
PETER ŠIMON (Czechoslovakia)
Kinetic aspects of temperature-dependent cooperation of binary stabilizing systems . . 163
MARIA UHNIAT & CZESŁAW LATOCHA (Poland)
Thermal oxidation of anhydride cured epoxies II—Depth distribution of oxidation products 171
H. M. LE HUY, V. BELLENGER, M. PARIS & J. VERDU (France)
Polymer oxidation downstream from oxygen microwave plasmas 181
L. J. MATIENZO & F. D. EGITTO (USA)
Calendar of Events 193

Number 3

9,10-Anthraquinone derivatives as photoinitiators of crosslinking or degradation of polyethylene 195
P. ZAMOTAEV, O. MITYUKHIN & S. LUZGAREV (USSR)
The mechanism of photostabilization by hindered amines: ESR evidence of dark reactions with regeneration of nitroxyl radicals in the inhibited photooxidation of polyolefin model systems 211
A. FAUCITANO, A. BUTTAFAVA, F. MARTINOTTI & L. GRECI (Italy)
Magic angle ^{13}C NMR determination of the fate of ketone end groups during photolysis of crosslinked acrylic copolymers 219
K. R. CARDUNER, D. R. BAUER, J. L. GERLOCK & D. F. MIELEWSKI (USA)
Retardation of polymer oxidation by natural antioxidant gossypol: Part 2—Abnormal effects of sulphide and other additives 229
A. P. MAR'IN, YU. A. SHLYAPNIKOV, E. S. MAMETOV & A. T. DZHALILOV (USSR)
Wavelength sensitivity of unstabilized and UV stabilized polycarbonate to solar simulated radiation 235
ANTHONY L. ANDRADY, NORMA D. SEARLE & LESLEY F. E. CREWDSON (USA)
Kinetics of polymer degradation involving the splitting-off of small molecules: Part 6—Dehydrochlorination of PVC in an atmosphere of HCl 249
PETER ŠIMON & LADISLAV VALKO (Czechoslovakia)
Polymer complexes XII: Polymerization of methyl acrylate in the presence of some transition metal salts 255
A. Z. EL-SONBATI, H. M. KILLA, M. F. KOTB & M. A. DIAB (Egypt)

The effect of pentaerythritol on the kinetics of the heat stabilization of PVC with cadmium stearate 261
GY. LÉVAI, GY. OCSKAY & ZS. NYITRAI (Hungary)
Photooxidation and photodestruction of modified polyamides 267
V. B. IVANOV, I. I. BARASHKOVA, V. V. SELIKHOV, V. N. VYSOTSKY, YU. YU. YAKOVLEV, R. A. SADEKOVA & N. N. BARASHKOV (USSR)
Molecular analysis of the mechanical degradation of polymer solution through a porous medium 277
M. MOAN & A. OMARI (France)
Reaction of polyacrylonitrile with superoxide anion 283
ARATA KUMAKURA, KEIJI KOBAYASHI, YOSHIHITO UCHIDA & ZENJIRO OSAWA (Japan)
Calendar of Events 291